

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A dishonest registration preventive apparatus in a personal authentication system, which collates an image obtained by photographing a person with a beforehand registered image to authenticate the person on the basis of results of the collation, the apparatus comprising:

detection means for detecting positions of the person from a plurality of images acquired by consecutively photographing the person,

calculation means for calculating a variation between a position of the person at a current time and a position of the person at a previous time, which are detected by the detection means,

feature extraction means for extracting face feature quantities from images of the plurality of images,

similarity calculation means for determining a degree of similarity of face feature quantities extracted from an image of the person taken at a current time with face feature quantities extracted from an image of the person taken at a previous time,

determination means for comparing the variation calculated by the calculation means with a first predetermined threshold and comparing the degree of similarity to a second predetermined threshold to determine that an image of the plurality of images is a registrable image when the

variation does not amount to the first threshold and the degree of similarity is greater than the second threshold and to determine that the image of the plurality of images is an unregistrable image when the variation exceeds the first threshold or the degree of similarity does not exceed the second threshold, and

storage means for registering and storing images, which are determined by the determination means to be registrable.

2. (Currently Amended) The dishonest registration preventive apparatus according to claim 1, wherein the determination means determines the image of the plurality of images to be unregistrable when the variation calculated by the calculation means is over the first threshold or the degree of similarity is not over the second threshold, and determines that those images among the plurality of images, which are acquired subsequent to the image of the plurality of images having been determined to be unregistrable, are all unregistrable.
3. (Currently Amended) A dishonest registration preventive apparatus in a personal authentication system, which collates an image obtained by photographing ~~[[øf]]~~ a person with a beforehand registered image to authenticate the person on the basis of results of the collation, the apparatus comprising:

detection means for detecting positions of the person from a plurality of images acquired by consecutively photographing the person,

measurement means for measuring an interval until a position at a current time is detected after a position at a previous time is detected, which are detected by the detection means,

feature extraction means for extracting face feature quantities from images of the plurality of images,

similarity calculation means for determining a degree of similarity of face feature quantities extracted from an image of the person taken at a current time with face feature quantities extracted from an image of the person taken at a previous time,

determination means for comparing the interval measured by the measurement means with a first predetermined threshold and comparing the degree of similarity to a second predetermined threshold to determine that a current image is a registrable image when the interval does not amount to the first threshold and the degree of similarity is greater than the second threshold and to determine that the current image is an unregistrable image when the interval exceeds the first threshold or the degree of similarity does not exceed the second threshold, and

storage means for registering and storing images, which are determined by the determination means to be registrable.

4. (Currently Amended) The dishonest registration preventive apparatus according to claim 3, wherein the determination means determines the current image to be unregistrable when the interval measured by the measurement means is over the first threshold or the degree of similarity is not over the second threshold, and determines that those images among the plurality of images, which are acquired subsequent to the current image having been determined to be unregistrable, are all unregistrable.
5. (Currently Amended) A dishonest registration preventive apparatus in a personal authentication system, which collates an image obtained by photographing [[øf]] a person with a beforehand registered image to authenticate the person on the basis of results of the collation, the apparatus comprising:
 - detection means for detecting positions of a predetermined part of the person from a plurality of images acquired by consecutively photographing the predetermined part,
 - calculation means for calculating a variation between a position at this time and a position at a previous time, which are detected by the detection means,
 - measurement means for measuring an interval until a position at this time is detected after a position at the last time is detected, which are detected by the detection means,

feature extraction means for extracting face feature quantities from images of the plurality of images,

similarity calculation means for determining a degree of similarity of face feature quantities extracted from an image of the person taken at a current time with face feature quantities extracted from an image of the person taken at a previous time,

determination means for comparing the variation calculated by the calculation means with a first predetermined threshold, [[and]] comparing the interval measured by the measurement means with a second predetermined threshold, and comparing the degree of similarity to a third predetermined threshold to determine an image at this time as a registrable image when the variation and the interval do not amount to the respective first and second thresholds and the degree of similarity is greater than the third threshold and to determine the image at this time as an unregistrable image when the variation or the interval is over the respective first or second threshold or the degree of similarity is not over the third threshold, and

storage means for registering and storing images, which are determined by the determination means to be registrable.

6. (Currently Amended) The dishonest registration preventive apparatus according to claim 5, wherein the determination means determines the image at this time to be unregistrable when the variation or the interval is over the respective first or second threshold or the degree of similarity is not over the third threshold and determines that those images among the plurality of images, which are acquired subsequent to the image at this time having been determined to be unregistrable, are all unregistrable.